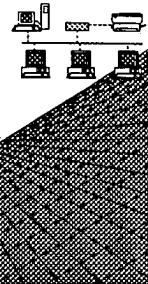


M. Moran

CRF D

BIOTECHNOLOGY  
SYSTEMS  
BRANCH



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following CRF diskette:

Application Serial Number:

09/074472

Art Unit / Team No. :

1623

Date Processed by STIC:

12/14/98

**THE ATTACHED PRINTOUT EXPLAINS THE ERRORS DETECTED.**

**PLEASE BE SURE TO FORWARD THIS INFORMATION TO THE APPLICANTS BY EITHER:**

**1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANTS ALONG WITH A NOTICE TO COMPLY or,**

**2) CALLING APPLICANTS AND FAXING THEM A COPY OF THE PRINTOUT WITH A NOTICE TO COMPLY**

**THIS WILL INSURE THAT THE NEXT SUBMISSION RECEIVED FROM THEM WILL BE ERROR FREE.**

**IF YOU HAVE ANY FURTHER QUESTIONS, PLEASE CALL:**

**ARTI SHAH 703-308-4212**

# Raw Sequence Listing Error Summary

## ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/074472

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics      The number/text at the end of each line "wrapped" down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2      Wrapped Aminos      The amino acid number/text at the end of each line "wrapped " down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3      Incorrect Line Length      The rules require that a line not exceed 72 characters in length. This includes spaces.  
All text must be visible on page.
- 4      Misaligned Amino Acid      The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs  
Numbering      between the numbering. It is recommended to delete any tabs and uses spacing between the numbers.
- 5      Non-ASCII      This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.  
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6      Variable Length      Sequence(s)      contain n's or Xaa's which represented more than one residue.  
As per the rules, each n or Xaa can only represent a single residue.  
Please present the maximum number of each residue having variable length and  
indicate in the (ix) features section that some may be missing.
- 7      Wrong Designation      Sequence(s)      contain amino acid or nucleic acid designators which are not standard  
representations as per the Sequence Rules (Please refer to paragraph 1.822)
- 8      Skipped Sequences      Sequence(s)      missing. If intentional, please use the following format for each skipped sequence:  
(OLD RULES)      (2) INFORMATION FOR SEQ ID NO:X:  
                                 (I) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")  
                                 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:  
                                 This sequence is intentionally skipped  
  
Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9      Skipped Sequences      Sequence(s)      missing. If intentional, please use the following format for each skipped sequence.  
(NEW RULES)      <210> sequence id number  
                                 <400> sequence id number  
                                 000
- 10      Use of N's or Xaa's      Use of N's and/or Xaa's have been detected in the Sequence Listing.  
(NEW RULES)      Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
- 11      Use of <213>Organism      Sequence(s)      are missing this mandatory field or its response.  
(NEW RULES)      *1-11 (possibly more after seq 11)*
- 12      Use of <220>Feature      Sequence(s)      are missing the <220>Feature and associated headings.  
(NEW RULES)      Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"  
                                 (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32)  
                                 (Sec. 1.823 of new Sequence Rules)
- 13      Wrong Format      File submitted was in the alphabetical heading format of the Old Sequence Rules. This is invalid since the  
                                 "Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Disclosures"  
                                 Federal Register Notice, Vol. 63, No. 104, June 1, 1998, p. 29620  
                                 applies to applications filed on or after July 1, 1998.  
                                 AKS-Biotechnology Systems Branch- 7/10/98

m. no. an.

1623

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/074,472

DATE: 12/14/1998  
TIME: 16:45:31

Input Set: I074472.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

Please consult  
1.821 of new  
sequence  
new format rules

Does Not Comply  
Corrected Diskette Needed

1 <110> APPLICANT: Richter, Mark M  
2 Powell, Michael J  
3 Belisle, Christopher M  
4 <120> TITLE OF INVENTION: Assays Employing Electrochemiluminescent Labels and  
5 Electrochemiluminescence Quenchers  
6 <130> FILE REFERENCE: 337462000600  
7 <140> CURRENT APPLICATION NUMBER: US/09/074,472  
8 <141> CURRENT FILING DATE: 1998-05-07  
9 <160> NUMBER OF SEQ ID NOS: 16  
10 <170> SOFTWARE: PatentIn Ver. 2.0  
11 <210> SEQ ID NO 1  
12 <211> LENGTH: 20

13 <212> TYPE: DNA  
14 <213> ORGANISM: Artificial Sequence  
15 <220> FEATURE:  
16 <400> SEQUENCE: 1

see item 12 on Enr summary sheet

17 atcgtgcggt ggttgaactg

20

18 <210> SEQ ID NO 2

19 <211> LENGTH: 22

20 <212> TYPE: DNA

21 <213> ORGANISM: Artificial Sequence

item 12

22 <220> FEATURE:

23 <221> NAME/KEY: modified\_base

24 <222> LOCATION: (1)

25 <223> OTHER INFORMATION: n denotes the Ru(bpy)<sub>3</sub> (superscript  
26 +2)-containing group.

IMPORTANT: "n" can only represent  
a single

27 <220> FEATURE:

28 <221> NAME/KEY: modified\_base

29 <222> LOCATION: (22)

30 <223> OTHER INFORMATION: n denotes the biotin-containing group.

"n" cannot represent anything but  
a nucleic acid

nucleic  
acid, not  
an element,  
not a group.

31 <220> FEATURE:

32 <400> SEQUENCE: 2

W-->

33 atcgtgcgg tgggtgaact gn

22

34 <210> SEQ ID NO 3

35 <211> LENGTH: 23

36 <212> TYPE: DNA

37 <213> ORGANISM: Artificial Sequence

38 <220> FEATURE:

39 <221> NAME/KEY: modified\_base

40 <222> LOCATION: (1)

41 <223> OTHER INFORMATION: n denotes Ru(bpy)<sub>3</sub> (superscript  
42 +2)-containing group.

see above ↑

43 <220> FEATURE:

44 <221> NAME/KEY: modified\_base

PAGE: 2

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/074,472

DATE: 12/14/1998  
TIME: 16:45:31

Input Set: I074472.RAW

45 <222> LOCATION: (23)

46 <223> OTHER INFORMATION: n denotes the biotin-containing group. *see seq. 2*

47 <220> FEATURE:

48 <221> NAME/KEY: modified\_base

49 <222> LOCATION: (5)

50 <223> OTHER INFORMATION: t denotes "amine modified C, (subscript 6)-dT".

51 <220> FEATURE:

52 <400> SEQUENCE: 3 *"t" can only represent thymine, nothing else*

W--> 53 ncagttccaa ccaaccgcac gtn 23

54 <210> SEQ ID NO 4

55 <211> LENGTH: 23

56 <212> TYPE: DNA

57 <213> ORGANISM: Artificial Sequence

58 <220> FEATURE:

59 <221> NAME/KEY: modified\_base

60 <222> LOCATION: (1) *see seq 2*

61 <223> OTHER INFORMATION: n denotes the Ru(bpy), (subscript 3, superscript

62 +2)-containing group.

63 <220> FEATURE:

64 <221> NAME/KEY: modified\_base

65 <222> LOCATION: (22)

66 <223> OTHER INFORMATION: t denotes "amine modified C, (subscript 6)-dT". *same error as seq 3*

67 <220> FEATURE:

68 <221> NAME/KEY: modified\_base

69 <222> LOCATION: (23)

70 <223> OTHER INFORMATION: n denotes the biotin-containing group. *same error*

71 <220> FEATURE:

72 <400> SEQUENCE: 4

W--> 73 ncagttccaa ccaaccgcac gtn 23

74 <210> SEQ ID NO 5

75 <211> LENGTH: 28

76 <212> TYPE: DNA

77 <213> ORGANISM: Artificial Sequence

78 <220> FEATURE:

79 <221> NAME/KEY: modified\_base

80 <222> LOCATION: (1) *same error as seq 2*

81 <223> OTHER INFORMATION: n denotes the Ru(bpy), (subscript 3, superscript

82 +2)-containing group.

83 <220> FEATURE:

84 <221> NAME/KEY: modified\_base

85 <222> LOCATION: (23)..(27)

86 <223> OTHER INFORMATION: n denotes "Label On". *Reminder: "n" can only represent a single nucleic acid*

87 <220> FEATURE:

88 <221> NAME/KEY: modified\_base

89 <222> LOCATION: (28)

90 <223> OTHER INFORMATION: n denotes the biotin-containing group. *same error as seq. 2*

91 <220> FEATURE:

92 <400> SEQUENCE: 5

W--> 93 ncagttccaa ccaaccgcac gtnnnnnn 28

94 <210> SEQ ID NO 6

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RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/074,472

DATE: 12/14/1998  
TIME: 16:45:31

Input Set: I074472.RAW

95 <211> LENGTH: 24  
96 <212> TYPE: DNA  
97 <213> ORGANISM: Artificial Sequence  
98 <220> FEATURE:  
99 <221> NAME/KEY: modified\_base  
100 <222> LOCATION: (1)  
101 <223> OTHER INFORMATION: n denotes the Ru(bpy), (subscript 3, superscript  
102 +2)-containing group.  
103 <220> FEATURE:  
104 <221> NAME/KEY: modified\_base  
105 <222> LOCATION: (5)  
106 <223> OTHER INFORMATION: t denotes "amine modified C, (subscript 6)-dT".  
107 <220> FEATURE:  
108 <221> NAME/KEY: modified\_base  
109 <222> LOCATION: (6)  
110 <223> OTHER INFORMATION: n denotes the "quenching moiety".  
111 <220> FEATURE:  
112 <221> NAME/KEY: modified\_base  
113 <222> LOCATION: (24)  
114 <223> OTHER INFORMATION: n denotes the biotin-containing group.  
115 <220> FEATURE:

*n can only  
denote a single  
nucleic acid*

W--&gt;

116 <400> SEQUENCE: 6  
117 ~~ncagtttcca~~ accaaccgca cgtt  
118 <210> SEQ ID NO 7  
119 <211> LENGTH: 24  
120 <212> TYPE: DNA  
121 <213> ORGANISM: Artificial Sequence  
122 <220> FEATURE:  
123 <221> NAME/KEY: modified\_base  
124 <222> LOCATION: (1)  
125 <223> OTHER INFORMATION: n denotes the Ru(bpy), (subscript 3, superscript  
126 +2)-containing group.  
127 <220> FEATURE:  
128 <221> NAME/KEY: modified\_base  
129 <222> LOCATION: (22)  
130 <223> OTHER INFORMATION: t denotes "amine modified C, (subscript 6)-dT".  
131 <220> FEATURE:  
132 <221> NAME/KEY: modified\_base  
133 <222> LOCATION: (23)  
134 <223> OTHER INFORMATION: n denotes the "quenching moiety".  
135 <220> FEATURE:  
136 <221> NAME/KEY: modified\_base  
137 <222> LOCATION: (24)  
138 <223> OTHER INFORMATION: n denotes the biotin-containing group.  
139 <220> FEATURE:

24

W--&gt;

140 <400> SEQUENCE: 7  
141 ~~ncagtttccaa~~ ccaaccgcac gttt  
142 <210> SEQ ID NO 8  
143 <211> LENGTH: 33  
144 <212> TYPE: DNA

24

PAGE: 4

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/074,472

DATE: 12/14/1998  
TIME: 16:45:31

Input Set: I074472.RAW

145 <213> ORGANISM: Artificial Sequence

146 <220> FEATURE:

147 <221> NAME/KEY: modified\_base

148 <222> LOCATION: (1)

149 <223> OTHER INFORMATION: n denotes the Ru(bpy)<sub>3</sub><sup>+2</sup>-containing group.

150

151 <220> FEATURE:

152 <221> NAME/KEY: modified\_base

153 <222> LOCATION: (23)

154 <223> OTHER INFORMATION: n denotes "Label On".

155 <220> FEATURE:

156 <221> NAME/KEY: modified\_base

157 <222> LOCATION: (25)

158 <223> OTHER INFORMATION: n denotes "Label On".

159 <220> FEATURE:

160 <221> NAME/KEY: modified\_base

161 <222> LOCATION: (27)

162 <223> OTHER INFORMATION: n denotes "Label On".

163 <220> FEATURE:

164 <221> NAME/KEY: modified\_base

165 <222> LOCATION: (29)

166 <223> OTHER INFORMATION: n denotes "Label On".

167 <220> FEATURE:

168 <221> NAME/KEY: modified\_base

169 <222> LOCATION: (31)

170 <223> OTHER INFORMATION: n denotes "Label On".

171 <220> FEATURE:

172 <221> NAME/KEY: modified\_base

173 <222> LOCATION: (24)

174 <223> OTHER INFORMATION: n denotes the "quenching moiety".

175 <220> FEATURE:

176 <221> NAME/KEY: modified\_base

177 <222> LOCATION: (26)

178 <223> OTHER INFORMATION: n denotes the "quenching moiety".

179 <220> FEATURE:

180 <221> NAME/KEY: modified\_base

181 <222> LOCATION: (28)

182 <223> OTHER INFORMATION: n denotes the "quenching moiety".

183 <220> FEATURE:

184 <221> NAME/KEY: modified\_base

185 <222> LOCATION: (30)

186 <223> OTHER INFORMATION: n denotes the "quenching moiety".

187 <220> FEATURE:

188 <221> NAME/KEY: modified\_base

189 <222> LOCATION: (32)

190 <223> OTHER INFORMATION: n denotes the "quenching moiety".

191 <400> SEQUENCE: 8

192 ncagttccaa ccaaccgcac gtnnnnnnnnn nnn → no (220)-(223) explanation

193 <210> SEQ ID NO 9

194 <211> LENGTH: 25

all notation  
in seq 6

W--&gt;

33

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# RAW SEQUENCE LISTING PATENT APPLICATION US/09/074,472

DATE: 12/14/1998  
TIME: 16:45:31

Input Set: I074472.RAW

195 <212> TYPE: DNA  
 196 <213> ORGANISM: Artificial Sequence  
 197 <220> FEATURE:  
 198 <221> NAME/KEY: modified\_base  
 199 <222> LOCATION: (1)  
 200 <223> OTHER INFORMATION: n denotes "5'-amino modifier".  
 201 <220> FEATURE:  
 202 <221> NAME/KEY: modified\_base  
 203 <222> LOCATION: (24)  
 204 <223> OTHER INFORMATION: n denotes "carboxyl modified dT".  
 205 <220> FEATURE:  
 206 <221> NAME/KEY: modified\_base  
 207 <222> LOCATION: (25)  
 208 <223> OTHER INFORMATION: n denotes the biotin-containing group.  
 209 <220> FEATURE:  
 210 <400> SEQUENCE: 9  
 W--> 211 nacgccactg gatccacagt tag<sup>n</sup> 25  
 212 <210> SEQ ID NO 10  
 213 <211> LENGTH: 25  
 214 <212> TYPE: DNA  
 215 <213> ORGANISM: Artificial Sequence  
 216 <220> FEATURE:  
 217 <221> NAME/KEY: modified\_base  
 218 <222> LOCATION: (24)  
 219 <223> OTHER INFORMATION: n denotes "carboxyl modified dT".  
 220 <220> FEATURE:  
 221 <221> NAME/KEY: modified\_base  
 222 <222> LOCATION: (25)  
 223 <223> OTHER INFORMATION: n denotes biotin-containing group.  
 224 <220> FEATURE:  
 225 <220> FEATURE:  
 226 <221> NAME/KEY: modified\_base  
 227 <222> LOCATION: (19)  
 228 <223> OTHER INFORMATION: n is unknown.  
 229 <400> SEQUENCE: 10  
 W--> 230 aacgccactg gatccacant tag<sup>n</sup> 25  
 231 <210> SEQ ID NO 11  
 232 <211> LENGTH: 27  
 233 <212> TYPE: DNA  
 234 <213> ORGANISM: Artificial Sequence  
 235 <220> FEATURE:  
 236 <221> NAME/KEY: modified\_base  
 237 <222> LOCATION: (1)  
 238 <223> OTHER INFORMATION: t denotes amine modified C, (subscript 6)-dT".  
 239 <220> FEATURE:  
 240 <221> NAME/KEY: modified\_base  
 241 <222> LOCATION: (26)  
 242 <223> OTHER INFORMATION: n denotes "carboxyl modified dT".  
 243 <220> FEATURE:  
 244 <221> NAME/KEY: modified\_base

## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY  
PATENT APPLICATION US/09/074,472DATE: 12/14/1998  
TIME: 16:45:31

Input Set: I074472.RAW

Line	? Error/Warning	Original Text
33	W "N" or "Xaa" used: Feature required	natcgtgcgg tggttgaact gn
53	W "N" or "Xaa" used: Feature required	ncagttccaa ccaaccgcac gtn
73	W "N" or "Xaa" used: Feature required	ncagttccaa ccaaccgcac gtn
93	W "N" or "Xaa" used: Feature required	ncagttccaa ccaaccgcac gtnnnnnn
117	W "N" or "Xaa" used: Feature required	ncagtntcca accaaccgca cgtn
141	W "N" or "Xaa" used: Feature required	ncagttccaa ccaaccgcac gttn
192	W "N" or "Xaa" used: Feature required	ncagttccaa ccaaccgcac gtnnnnnnnn nnn
211	W "N" or "Xaa" used: Feature required	nacgccactg gatccacagt tagnn
230	W "N" or "Xaa" used: Feature required	aacgccactg gatccacant tagnn
249	W "N" or "Xaa" used: Feature required	tttgcggtga cctaggtgtc aatcann
264	W "N" or "Xaa" used: Feature required	ttgcggtgac ctaggtgtcc atcann
292	W "N" or "Xaa" used: Feature required	nnacgccact ggatccacag ttagnnn
316	W "N" or "Xaa" used: Feature required	aacgccactg gatccacant tagnnn
344	W "N" or "Xaa" used: Feature required	ntttgcggtg acctaggtgt caatcannn
364	W "N" or "Xaa" used: Feature required	ttgcggtgac ctaggtgtcc atcannn